

Amendments to the Claims

The following Listing of Claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended) A fiber optic receiver, comprising:
a receiver optical sub-assembly (ROSA) comprising a lens assembly, and housing an
opto-electronic transducer configured to generate an electrical data signal in response to a
received optical data signal and [[:]] an adjustable response preamplifier circuit electrically
coupled to the opto-electronic transducer and operable to amplify an electrical data signal
generated by the opto-electronic transducer; and
a mode selection circuit located outside of the ROSA and electrically coupled to an
output of the preamplifier circuit and configured to transmit a mode control signal to the
preamplifier circuit in response to a received control signal.

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Claim 2 (Original) The fiber optic receiver of claim 1, wherein the mode selection
circuit is configured to transmit the mode control signal to the preamplifier circuit in response
to a received data rate control signal.

Claim 3 (Original) The fiber optic receiver of claim 1, wherein the mode selection
circuit is configured to transmit the mode control signal to the preamplifier circuit in response
to a received power mode control signal.

Claim 4 (Currently Amended) A fiber optic receiver, comprising:
an opto-electronic transducer configured to generate an electrical data signal in
response to a received optical data signal;
an adjustable response preamplifier circuit electrically coupled to the opto-electronic
transducer and operable to amplify an electrical data signal generated by the opto-electronic
transducer;
a post-amplifier circuit electrically coupled to the preamplifier circuit; and

a mode selection circuit electrically coupled to an output of the preamplifier circuit and configured to transmit a mode control signal to the preamplifier circuit in response to a received control signal ~~The fiber optic receiver of claim 1~~, wherein the mode selection circuit is configured to modulate the mode control signal onto at least one [[a]] common line coupled between the preamplifier circuit and the post-amplifier circuit.

Claim 5 (Currently Amended) The fiber optic receiver of claim 4, wherein the mode selection circuit is configured to modulate the mode control signal onto the at least one common line as a single pulse.

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Claim 6 (Currently Amended) The fiber optic receiver of claim 4, wherein the mode selection circuit is configured to modulate the mode control signal onto the at least one common line as a multiple pulse pattern.

Claim 7 (Currently Amended) The fiber optic receiver of claim 4, wherein the mode selection circuit is configured to modulate the mode control signal onto the at least one common line as a time-varying signal.

Claim 8 (Original) The fiber optic receiver of claim 1, wherein the preamplifier circuit comprises a mode detection circuit configured to generate a response control signal for adjusting the response of the preamplifier circuit based upon the mode control signal transmitted by the mode selection circuit.

Claim 9 (Currently Amended) The fiber optic receiver of claim 4 [[8]], further comprising a mode detection circuit configured to generate a response control signal for adjusting the response of the preamplifier circuit based upon the mode control signal transmitted by the mode selection circuit, wherein the mode detection circuit is configured to detect one or more mode control signal pulses modulated onto the at least one [[a]] common line onto which the mode control signal is modulated ~~coupled between the preamplifier circuit and the mode selection circuit~~.

Claim 10 (Currently Amended) The fiber optic receiver of claim 8 [[9]], wherein the mode detection circuit is configured to detect the one or more mode control signal pulses based upon a comparison of a common line voltage with a reference voltage.

Claim 11 (Original) The fiber optic receiver of claim 8, wherein the mode detection circuit is configured to detect a time-varying mode control signal modulated onto a common line coupled between the preamplifier circuit and the mode selection circuit.

Claim 12 (Original) The fiber optic receiver of claim 11, wherein the mode detection circuit comprises a frequency detector.

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Claim 13 (Original) The fiber optic receiver of claim 1, wherein the preamplifier circuit is configured to select one of multiple sets of operating parameters based upon the mode control signal transmitted by the mode selection circuit.

Claim 14 (Original) The fiber optic receiver of claim 13, wherein the preamplifier circuit is configured to adjust one or more bandwidth response parameters in response to a bandwidth mode control signal transmitted by the mode selection circuit.

Claim 15 (Original) The fiber optic receiver of claim 13, wherein the preamplifier circuit is configured to adjust one or more supply current operating parameters in response to a power mode control signal transmitted by the mode selection circuit.

Claim 16 (Original) The fiber optic receiver of claim 1, wherein the mode selection circuit is incorporated within a post-amplifier circuit.

Claim 17 (Currently Amended) The fiber optic receiver of claim 1, wherein the ~~further comprising a receiver optical sub-assembly (ROSA) comprising~~ comprises a fiber optic connector for coupling to a mating connector of a fiber optic cable.

Claim 18 (Canceled)

Claim 19 (Currently Amended) The fiber optic receiver of claim 1 [[18]], wherein the ROSA and the post-amplifier circuit are mounted on a common substrate.

Claim 20 (Original) A fiber optic receiver, comprising:

a substrate;

a receiver optical sub-assembly (ROSA) mounted on the substrate and comprising a fiber optic connector for coupling to a mating connector of a fiber optic cable;

an opto-electronic transducer incorporated within the ROSA and configured to generate an electrical data signal in response to a received optical data signal;

an adjustable response preamplifier circuit incorporated within the ROSA, coupled to the opto-electronic transducer, and operable to amplify an electrical data signal generated by the opto-electronic transducer; and

a post-amplifier circuit mounted on the substrate, coupled to an output of the preamplifier circuit, and configured to transmit a mode control signal to the preamplifier circuit over one or more common lines coupled between the preamplifier circuit and the post-amplifier circuit in response to a received data rate control signal.

Claim 21 (new): The fiber optic receiver of claim 4, wherein at least one common line onto which the mode control signal is modulated is a line selected from: a data signal line and a power line.

Claim 22 (new): The fiber optic receiver of claim 20, wherein at least one common line onto which the mode control signal is modulated is a line selected from: a data signal line and a power line.
